

REMARKS/ARGUMENTS

Favorable reconsideration of this Application, as presently amended and in light of the following discussion, is respectfully requested.

This Amendment is in response to the Office Action mailed on April 7, 2005. Claims 1, 2, 4-7, 9, 10, 12-15, 17, 20, 21, 23-26, and 29-31 are pending in the Application and Claims 1, 2, 4-7, 9, 10, 12-15, 17, 20, 21, 23-26, and 29 stand rejected. Claims 1, 7, 9, 15, 20, 26, and 29 are amended, Claims 3, 8, 11, 16, 22, 27, and 28 are cancelled without prejudice or disclaimer, and new Claims 30 and 31 are added by the present Amendment.

Summarizing the outstanding Final Office Action, the Amendment filed on February 2, 2005 was objected under 35 U.S.C. § 132; the drawings were objected under 37 C.F.R. § 1.83(a); Claims 5, 13, and 24 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement; Claims 3, 7, 8, 11, 15, 16, and 20-28 were rejected under 35 U.S.C. § 112, second paragraph; Claims 1, 2, 4-6, 7, 9, 10, 12-14, 15, 17, and 20-28 were rejected under 35 U.S.C. §102(e) as being anticipated by Daikuhara (U.S. Patent No. 6,402,368, hereinafter “Daikuhara”); and Claim 29 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Azuma (JP 10-220480, hereinafter “Azuma”) in view of Daikuhara.

Applicants thank Examiner Bradley J. Van Pelt and Primary Examiner Tom Hannon for the courtesy of an interview extended to Applicants’ representative on May 18, 2005. During the interview, amendments to the claims as herein presented were proposed, and arguments as hereinafter developed were presented.

During the personal interview Applicants’ representative explained the differences between the inventions claimed in this application and the cages taught and disclosed in Daikuhara and Azuma. As further elaborated below, the new-matter rejections and objections were discussed.

As also discussed in the interview and further substantiated herein, as to Claim 17, Applicants respectfully submit that the outstanding Office Action failed to follow the required procedure to reject a claim containing means-plus-function language by disregarding the structure disclosed in Applicants' specification corresponding to the recited language according to the provisions of 35 U.S.C. §112, sixth paragraph.¹

In addition, a *prima facie* case of equivalence has not been made in the outstanding Office Action because the outstanding Office Action is devoid of any explanation and/or rationale as to why several elements in Daikuhara are equivalent to the ones recited.²

In particular, the outstanding Office Action is devoid of an explanation or rationale to explain: (1) how the retainer of Daikuhara performs an identical function substantially the same way to produce substantially the same results as the cage of the present invention;³ (2) how one of ordinary skill in the art recognizes the interchangeability of the elements of Daikuhara to the ones disclosed in Applicants' specification;⁴ (3) how the differences between elements in Daikuhara and corresponding elements disclosed in Applicants'

¹ "The broadest reasonable interpretation that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination." MPEP § 2181, citing *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994).

² MPEP § 2183 requires that an Examiner "provide an explanation and rationale in the Office Action as to why the prior art element is an equivalent."

³ A showing that "the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification" would be sufficient to support a conclusion that elements in the cited reference would be equivalents to the recited elements. See, for example, MPEP § 2183, citing *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000).

⁴ A showing that "a person of ordinary skill in the art would have recognized the interchangeability of the element shown in the prior art for the corresponding element disclosed in the specification" would be sufficient to support a conclusion that elements in the cited reference would be equivalents to the recited elements. See, for example, MPEP § 2183, citing *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); and *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987).

specification are insubstantial;⁵ or (4) how elements in Daikuhara are structural equivalents of the corresponding elements disclosed in Applicants' specification.⁶

Applicants respectfully submit that since the retainer of Daikuhara is a retainer that permits the insertion of lubricant in a closed space from behind the retainer, it does not perform the identical function substantially the same way to produce substantially the same results as the cage of the present invention. Moreover, given the substantial difference in their function and the final result produced, one of ordinary skill in the art would not recognize the interchangeability of elements in the retainer of Daikuhara with the elements disclosed in Applicants' specification and would not have found the differences between elements in Daikuhara and corresponding elements disclosed in Applicants' specification insubstantial because of their structural differences as summarized hereinabove.

Given the above-summarized differences in structures, operations, and purposes of the invention of Daikuhara and Applicants' invention, Applicants respectfully submit that the Office has not carried its burden as required for the proper rejection of Claim 17.

Although an agreement with respect to claims was not reached during the personal interview, Examiner Van Pelt indicated on the interview summary (form PTO 413) that:

“(1) Agreed that amended claims 1 and 9, as attached herein, overcome the immediate prior art;

(2) Discussed the limitation “closed conduit” in regards to claim 29 and agreed that the limitation is not new matter;

⁵ A showing that “there are insubstantial differences between the prior art element and the corresponding element disclosed in the specification” would be sufficient to support a conclusion that elements in the cited reference would be equivalents to the recited elements. See, for example, MPEP § 2183, citing *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436, 54 USPQ2d 1129, 1138 (Fed. Cir. 2000); *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 117 S. Ct. 1040, 41 USPQ2d 1865, 1875 (1997); *Valmont Industries, Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 25 USPQ2d 1451 (Fed. Cir. 1993); and *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000).

⁶ A showing that “the prior art element is a structural equivalent of the corresponding element disclosed in the specification” would be sufficient to support a conclusion that elements in the cited reference would be equivalents to the recited elements. See, for example, MPEP § 2183, citing *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

(3) Discussed new matter rejection and did not reach an agreement. Applicant reserves the right to file a petition;

(4) Agreed that if applicant cancels Claims 3, 8, 11, 16, and 22, 112 2nd paragraph rejections as to those claims will be withdrawn. Agreed proposed amendment, as attached therein, will overcome 112 and paragraph rejections to Claims 7, 15, 20, and 26; and

(5) Agreed that finality of the prior Office Action has been withdrawn.”

Claims 1, 7, 9, 15, 20, and 26 were amended with the language agreed upon during the personal interview and Claims 3, 8, 11, 16, 22, 27, and 28 have been canceled. Based at least on the foregoing discussion, the instant amendment and cancellation of claims, and the results of the personal interview, Applicants respectfully submit that the above-summarized rejections of Claims 1, 2, 4, 6, 7, 9, 10, 12, 14, 15, 17, 20, 21, 23, 25, and 26 are now moot. Their withdrawal is respectfully requested. Applicants further note with appreciation the withdrawal of the finality of the outstanding Office Action during the personal interview.

As to the objections to Applicants’ specification and drawings and rejection of Claims 5, 13, and 24, Applicants respectfully request reconsideration to the objections and withdrawal of the rejection based on the following discussion.

Claim 5 is an originally filed claim reciting that the storage space of Claim 1 is a recess that widens outwardly from a bottom to an opening of the storage space. Claims 13 and 24 recite similar subject matter. This subject matter was clearly disclosed in Applicants’ specification.⁷ During the personal interview held on September 8, 2004, Claim 5 was objected to for reciting a subject matter capable of illustration, but which had not been illustrated in the drawings. It is accepted patent examination procedure that “if subject matter capable of illustration is originally claimed [*and clearly described in the specification*] and it is not shown in the drawings, *the claim is not rejected* but applicant is required to add it to

⁷ See, for example, Specification, page 5, paragraph [0021].

the drawing.”⁸ Such an examination procedure is based on the policy that “information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter.”⁹ In the RCE filed on February 7, 2005, a new FIG. 4 was submitted illustrating the subject matter recited in Claim 5 and the instant amendment amends the specification with a brief description of FIG. 4.

In the outstanding Office Action, in order to support the objection to Applicants’ amendment filed on February 2, 2005, it was asserted that “New Fig. 4 is new matter, since Fig. 4 discloses further detail, such as the angle of the walls 24, 25 to the bottom of the opening 21.” Applicants respectfully disagree and note that no specific angle of inclination of the walls is illustrated or claimed. New FIG. 4 shows a recess that widens outwardly from a bottom to an opening of the storage space as originally recited in Claim 5. As originally explained in Applicants’ specification, as a non-limiting example, new FIG. 4 illustrates a recess 20 that widens out from the bottom 21 to the opening 26, such that the pair comprising of the lateral faces 24 and 25 (which are illustrated in the new FIG. 4) and the pair comprising the internal wall 22 and the external wall 23 (not shown in the view illustrated in the new FIG. 4) move away from one another from the bottom 21 to the opening 26. There is no new detail incorporated in the new FIG. 4; it simply illustrates subject matter originally claimed and originally disclosed.

As to the assertion that “the limitation wherein said storage space is a recess that widens outwardly from a bottom to an opening of said storage space does not preclude various embodiments, for instance the walls may be stepped such that it widens from the bottom to the opening,” Applicants respectfully submit that current patent examining

⁸ See, for example, MPEP § 706.03(s), citing MPEP § 608.01(I) (emphasis added).

⁹ See, MPEP § 2163.06.

procedure, as hereinabove summarized, requires that claimed subject matter capable of being illustrated be shown in the figures. There is no requirement that all possible embodiments in a claim be illustrated. New FIG. 4 illustrates the subject matter of Claim 5, thus satisfying the legal requirements in vigor, and it does that without the introduction of new matter because it simply illustrates subject matter originally claimed and disclosed. Based on the foregoing remarks, Applicants respectfully request that the objections to Applicants' specification and drawings be reconsidered and the rejection of Claims 5, 13, and 24 withdrawn.

As to the obviousness rejection of Claim 29, Applicants respectfully submit that Azuma and Daikuhara, neither individually nor in any combination thereof, support a *prima facie* case of obviousness of the invention recited in Claim 29. This is so for at least two reasons. First, even when combined, these references do not teach or suggest all the claimed features. Secondly, there is no motivation to combine the references.

Claim 29 recites a cage with a storage space, comprising, among other features, a substantially closed storage space for lubricant comprising an inner wall, a first lateral wall, a second lateral wall, an outer wall, a bottom, an opening, a first closed conduit, and a second closed conduit. An end of the first closed conduit opens into the first lateral wall and the other end opens into the first chamber and an end of the second closed conduit opens into the second lateral wall and the other opens into the second chamber such that lubricant from the substantially closed space is supplied to the first and second chambers via each of the closed conduits. Non-limiting support for the subject matter amended to Claim 29 is shown in FIG. 3 of Applicants' specification. As agreed during the personal interview, the present amendment to Claim 29 does not introduce new matter into this application.

Applicants respectfully submit that the passage 9 of Azuma is not a closed conduit. The outstanding Office Action further acknowledges that Azuma does not disclose an inner

wall. Applicants respectfully submit that Daikuhara, being cited for teaching and disclosing an inner wall, does not remedy the above-noted deficiency of Azuma. Therefore, the combination of Azuma and Daikuhara cannot support a *prima facie* case of obviousness of Claim 29 because the combination does not teach or disclose closed conduits.

Applicants respectfully further traverse the rejection of Claim 29 because there is no sufficient evidence of record for the required motivation to modify the Azuma device by incorporating Daikuhara's inner wall, for the following reasons.¹⁰

The outstanding Office Action states that the proposed modification would have been obvious "in view of the teachings of Daikuhara that such an arrangement improves the lubricant storage of the cage." Aside from this unsubstantiated and unarticulated statement of conclusion, the record, however, fails to provide the required evidence of a motivation for a person of ordinary skill in the art to perform such modification.

As explained during the personal interview, Daikuhara does not teach or disclose that its cage design "improves the lubricant storage of the cage." Daikuhara relates to a problem with the application of lubricant in an outer race integral bearing 10, after assembly of a retainer 1 in the openings of both ends of that assembly because conventionally "lubricant has been applied in the bearing through a tiny gap existing between the periphery of the retainer 1 and the inner circumferential surface of the outer race sleeve 11. However, since this gap is quite small, it has taken a long time for applying a necessary quantity of lubricant, which has brought a low workability."¹¹ As clearly explained in that reference,¹² the recess portion 23

¹⁰ See MPEP 2143.01 stating "[o]bviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art," (citations omitted). See also MPEP 2144.08 III stating that "[e]xplicit findings on motivation or suggestion to select the claimed invention should also be articulated in order to support a 35 U.S.C. 103 ground of rejection. . . . Conclusory statements of similarity or motivation, without any articulated rational or evidentiary support, do not constitute sufficient factual findings."

¹¹ Daikuhara, col. 1, lines 60-67.

of the cage of Daikuhara permits the insertion of lubricant into the bearing from the back of the retainer once the retainer is installed.

It was asserted during the interview that the purposed motivation to combine comes from the following statement in Daikuhara: “The present invention has been made to solve the above conventional problems, and a first object thereof is to provide a retainer to improve a lubricant-applying workability in a closed space of a bearing, and a second object is, in addition to the above first object, to provide a retainer enabling to apply a lubricant in a stable manner to a necessary portion in the bearing, and attain an increasing of the bearing function.”¹³ Applicants respectfully disagree and fails to see how the provision of a retainer enabling the application of lubricant in a stable manner and the attaining of an increased bearing function is substantial evidence that Daikuhara discloses or suggests that its cage “improves the lubricant storage of the cage,” as asserted in the outstanding Office Action.

In addition, the Azuma patent states that its structure already achieves the goal of providing a rolling body cage for a roller bearing capable of properly feeding the base oil of grease to a contact point part between a bearing ring and a rolling body from the initial stage of rolling.¹⁴ The Azuma patent does not suggest that further improvement is desired, nor that another feature should be added to further improve the proposed solution to the problem at hand. In particular, the Azuma patent does not suggest adding inner and outer walls, such as those disclosed in the Daikuhara patent.

The Azuma and Daikuhara patents, therefore, do not provide the motivation to perform the proposed modification of the Azuma device. In other words, an attempt to bring in the isolated teaching of Daikuhara’s inner and outer walls into the Azuma device would

¹² *Id.*, col. 3, lines 20-45.

¹³ *Id.*, col. 2, lines 5-12.

¹⁴ Azuma, abstract.

amount to improperly picking and choosing features from different references without regard to the teachings of the references as a whole.¹⁵ While the required evidence of motivation to combine need not come from the applied references themselves, the evidence must come from *somewhere* within the record. In this case, there is nothing in the record supporting the Office Action's proposed modification of the Azuma patent.

Furthermore, it is not clear from the record how Daikuhara's inner and outer walls could be incorporated into the Azuma device and how Azuma would maintain its operability in view of the additional inner and outer walls. Under such a modification, the passages in Azuma for the lubricant to return to the grease pocket 8 would be significantly restricted. In addition, such modification would require a substantial reconstruction or redesign of the elements of the Azuma device, and/or would change its basic principle of operation. There is no evidence that a person of ordinary skill in the art would be motivated to perform such changes and redesign.¹⁶

In rejecting a claim under 35 U.S.C. § 103(a), the USPTO must support its rejection by "substantial evidence" within the record,¹⁷ and by "clear and particular" evidence¹⁸ of a

¹⁵ See In re Ehrreich, 590 F.2d 902, 200 USPQ 504 (CCPA, 1979) (stating that patentability must be addressed "in terms of what would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the sum of all the relevant teachings in the art, not in view of first one and then another of the isolated teachings in the art," and that one "must consider the entirety of the disclosure made by the references, and avoid combining them indiscriminately.")

¹⁶ See In re Ratti, 270 F.2d 810, 813, 123 USPQ 349, 352 (reversing an obviousness rejection where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.")

¹⁷ In re Gartside, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000) (holding that, consistent with the Administrative Procedure Act at 5 USC 706(e), the CAFC reviews the Board's decisions based on factfindings, such as 35 U.S.C. § 103(a) rejections, using the 'substantial evidence' standard because these decisions are confined to the factual record compiled by the Board.)

¹⁸ In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, although 'the suggestion more often comes from the teachings of the pertinent references.' The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular." (emphasis added).

suggestion, teaching, or motivation to combine the teachings of different references. As discussed above, there is no substantial evidence, nor clear and particular evidence, within the record of a motivation for modifying the Azuma device by incorporating Daikuhara's inner and outer walls thereto. Without such motivation and absent improper hindsight reconstruction,¹⁹ a person of ordinary skill in the art would not be motivated to perform the proposed modification, and Claim 29 is believed to be non-obvious and patentable over the applied prior art.

For the foregoing remarks, Applicants respectfully request withdrawal of the rejection of Claim 29 under 35 U.S.C. § 103(a).

Finally, Applicants have submitted new Claims 30 and 31, which find non-limiting support on the subject matter originally disclosed as follows: (1) as to Claim 30, in the canceled claims; and (2) as to Claim 31, in the originally filed claims, Applicants' specification, and figures. Therefore, new Claims 30 and 31 are not believed to raise a question of new matter.²⁰ Claim 30 depends from Claim 29. Therefore, based at least on its dependency and the above-summarized remarks, applicants believe that Claim 30 patentability distinguish from Azuma and Daikuhara.

New independent Claim 31 recites a cage comprising means for storing and supplying a lubricant to rotating elements. Applicants respectfully submit that, under the provisions of 35 U.S.C. § 112, sixth paragraph and the examining procedures outlined in MPEP §§ 2181-2183, neither Azuma nor Daikuhara teaches or discloses the structural features, or equivalents thereof, disclosed in Applicants' specification and illustrated in the non-limiting examples

¹⁹ See MPEP 2141, stating, as one of the tenets of patent law applying to 35 USC 103, that "[t]he references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention."

²⁰ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

Application No. 10/085,110
Reply to Office Action of April 7, 2005

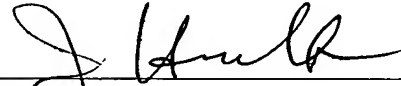
shown in Applicants' figures. As such, Claim 31 should be allowed over Azuma and Daikuhara.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1, 2, 4-7, 9, 10, 12-15, 17, 20, 21, 23-26, and 29-31 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representatives at the below listed telephone number.

Respectfully submitted,

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